

after receiving said transfer indication, transmitting a signal on said first frequency from said second base station to said mobile station using a waveform encoded with a second code; and

receiving at said mobile station said signals transmitted on said first frequency from said first and second base stations and decoding said signals using said first and second codes to produce a first and a second demodulated signal.

2. (Twice Amended) In a cellular mobile radio communications system including at least one mobile station and at least two base stations, a method of transferring communication with said mobile station from a first to a second of said base stations comprising the steps of:

transmitting a control signal on a first frequency from said first base station to said mobile station using a waveform encoded with a first code to inform said mobile station of a second frequency and a second code which relate to said second base station;

sending a transfer indication which commands the second base station to begin communicating with said mobile station from said first base station to said second base station;

after receiving said transfer indication, transmitting a signal on the second frequency from said second

base station to said mobile station using a waveform encoded with the second code; and

after receipt by said mobile of said control signal, receiving said signal on said second frequency and decoding said signal with said second code to produce a demodulated signal.

3. (Amended) A method according to claim 1, wherein said first code includes a first base station code for identifying said first base station combined with a first access code and said second code includes a second base station code for identifying said second base station combined with a second access code.

5. (Twice Amended) The method according to claim 4, wherein said error correcting step comprises selecting symbols from [performing diversity selection using] said first and second demodulated signals.

6. (Amended) The method according to claim 4, wherein said error correcting step comprises [performing diversity combination of] combining symbols from said first and second demodulated signals.

7. (Twice Amended) In a cellular mobile radio communications system including at least one mobile station

and at least two base stations, a method of transferring communication with said mobile station from a first to a second of said base stations comprising the steps of:

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decoding, at said mobile station, signals received simultaneously from said at least two base stations on a common frequency, each signal using a different code and modulated with the same data related to said communication,

and quantifying their [relative] respective signal strengths;

transmitting a signal from said mobile station indicating said [relative] respective signal strengths;

receiving at one of said at least two base stations said signal indicative of signal strengths and sending said signal indicative of signal strengths to a network controller; and

processing said indicated signal strengths in said network controller and selecting one of said at least two base stations to maintain communication with said mobile station.

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and
10. (Twice Amended) In a cellular mobile radio communications system including at least one mobile station and at least two base stations, a method of transferring communication with said mobile station from a first to a second of said base stations comprising the steps of:

transmitting a first traffic signal on a first frequency from said first base station to said mobile station using a waveform encoded with a first code;

transmitting a control message on said first frequency from said first base station to said mobile station using a waveform encoded with a second code;

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sending a transfer indication which commands said second base station to begin communicating with said mobile station from said first base station to said second base station;

after receiving said indication, transmitting a second traffic signal on said first frequency from said second base station to said mobile station using a waveform encoded with a third code; and

receiving at said mobile station said signals transmitted on said first frequency from said first and second base stations and decoding these signals using said first, second and third codes to obtain a first demodulated traffic signal, a decoded control message and a second demodulated traffic signal, respectively.

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11. (Amended) A method according to claim 10, wherein said first code includes a combination of a first base station code for identifying said first base station with a first traffic channel access code and said second code

includes combination of said first base station code with a control channel code.

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12. (Amended) A method according to claim 11 in which said third code includes a combination of a second base station code for identifying said second base station with a second traffic channel code.

13. (Amended) A method according to claim 11 in which said third code includes combination of a second base station code for identifying said second base station and a control channel code.

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14. (Twice Amended) A cellular mobile radio telephone system [using Code Division Multiple Access to facilitate handover between a first and second base station] comprising:

first and second base stations; and

a remote unit including:

signal processing means for producing an analog signal representative of signals received from said first and second base station on the same frequency;

analog to digital conversion means for converting said analog signal to a sequence of numerical values;